

SUSANA MARTINEZ GOVERNOR

JOHN A. SANCHEZ LIEUTENANT GOVERNOR

# New Mexico ENVIRONMENT DEPARTMENT

## Air Quality Bureau

1301 Siler Road, Building B Santa Fe, NM 87507-3113 Phone (505) 476-4300 Fax (505) 476-4375 www.nmenv.state.nm.us



## TITLE V OPERATING PERMIT Issued under 20.2.70 NMAC

Certified Ma	ail No: 7005	1820 0001	5770 6906
	eint Requeste		

Operating Permit No: P066-R2
Facility Name: Chino Mine

**Permittee Name:** Freeport-McMoRan Chino Mines Co **Mailing Address:** PO Box 10, Bayard, NM 88023

TEMPO/IDEA ID No: 526 - PRT20110002
AIRS No: 350170001
Permitting Action: Title V Renewal

Source Classification: Major – Title V and PSD Minor 32°41'55.6" N and 108°7'29.9" W Grant

Air Quality Bureau Contact: Joseph Kimbrell
Main AQB Phone No. (505) 476-4300

TV Permit Expiration Date: DEC 1 3 2017

TV Renewal Application Due: DEC 1 3 2016

Richard L. Goodyear, PE Bureau Chief

Date

DEC 13 2012

Bureau Chief Air Quality Bureau



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## PART A <u>FACILITY SPECIFIC REQUIREMENTS</u>

## **A100 Introduction**

A. Not Applicable

#### **A101 Permit Duration (expiration)**

- A. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)
- B. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate beyond the expiration date, provided that a timely renewal application is submitted no later than twelve (12) months prior to the expiration date. (20.2.70.400.D NMAC)

#### **A102** Facility: Description

A. The Chino Mine is located near Bayard, New Mexico, within Grant County. The mine produces copper cathode using the Solvent Extraction - Electro-winning (SX/EW) process in the SX/EW Plant and produces copper concentrate using a wet flotation process in the Ivanhoe Concentrator. Mine operations associated with the Santa Rita Pit consist of blasting, loading, hauling, placement of waste rock and leach rock on stockpiles, and transport of concentrator ore to the Primary Crusher.

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Concentrate slurry from the Ivanhoe Concentrator travels approximately seven miles by pipeline to the Filter and Blending Plants near Hurley, New Mexico where the slurry is dewatered and loaded into rail cars for transport to off-site smelters for further processing. Ancillary operations at Chino include a portable screening plant operated in the pit area and operation of the Chino Power Plant near Hurley. The Chino Power Plant produces electric power on an as-needed basis from one (1) Westinghouse natural gas-fired turbine and one (1) Nooter/Ericksen natural gas-fired Heat Recovery Steam Generator (HRSG) duct burner. The Cobre Mine is located approximately two miles north of the Chino Mine. The Cobre Mine property is contiguous and adjacent to the Chino Mine property. The primary activity at Cobre is a contractor owned and operated screening plant and the loading of magnetite into over-the-road trucks and rail cars for transport to customers off-site. There are also two (2) diesel-fired emergency generators at Cobre for use during unplanned power outages and a tailings impoundment from past operations at this site.

- B. This facility is located at UTM Zone 12, UTM Easting 773,115 km, UTM Northing 3,631,614 km, approximately 2.2 miles northeast of Bayard, New Mexico in Grant County. (20.2.70.302.A(7) NMAC)
- C. This renewal consists of incorporating changes authorized by NSR 0298-M5 and M6. This description is for informational purposes only and is not enforceable.
- D. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition, excluding insignificant or trivial activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	<b>Emissions (tons per year)</b>
Nitrogen Oxides (NOx) (non-fugitives of 209.2)	345.2
Carbon Monoxide (CO) (non-fugitives of 101.3)	1301.7
Volatile Organic Compounds (VOC)* (non-fugitives of 16.7)	18.9
Sulfur Dioxide (SO <sub>2</sub> ) (non-fugitives of 3.7)	55.7
Total Suspended Particulates (TSP) (non-fugitives of 34.4)	8208.0
Particulate Matter less than 10 microns (PM <sub>10</sub> ) (non-fugitives of 31.7)	2082.0
Particulate Matter less than 2.5 microns (PM <sub>2.5</sub> ) (non-fugitives of 24.4)	234.8

Table 102.B: Total Potential HAPs that exceed 1.0 tons per year

Pollutant	Emissions (tons per year)	
Total HAPs**	3.7	

<sup>\*</sup> VOC total includes emissions from HAPs, and Fugitives

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## A103 Facility: Applicable Regulations and Non-Applicable Regulations

A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

**Table 103.A:** Applicable Requirements

A WALL D.	Federally	Unit
Applicable Requirements	Enforceable	No.
NSR Permit No: 0298-M6 (Per 20.2.72 NMAC)	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.33 NMAC Gas Burning Equipment - Nitrogen	N/	SX/EW Boilers, Combustion
Dioxide	X	Turbine, HRSG
		Cobre Emergency Generators,
20.2.61 NMAC Smoke and Visible Emissions	X	SX/EW Boilers, Combustion
		Turbine, HRSG
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions	X	Entire Facility
Inventory Requirements		
20.2.75 NMAC Construction Permit Fees	X	Entire Facility
		F-2-1-1.4 (Combustion Turbine
20.2.77 NMAC New Source Performance Standards	X	- GG); F-2-1-1.5 (HRSG - Dc);,
20.2.77 WHAC IVEW Source I citorinance Standards		Concentrator (LL); CB SCRN
		ENG, CH SCRN ENG (IIII)
		Gasoline Dispensing Facilities
20.2.82 NMAC MACT Standards for Source		(CCCCCC)
Categories of HAPS	X	Cobre Emergency Generators
		and CB SCRN ENG & CH
		SCRN ENG (ZZZZ)
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	Entire Facility
40 CFR 60.40c, Subpart Dc, Subpart Dc,		
Performance Standards for Small Industrial-	X	F-2-1-1.5 (HRSG)
Commercial-Institutional Steam Generating Units		
40 CFR 60.330, Subpart GG, Standards of	X	F-2-1-1.4 (Combustion
Performance for Stationary Gas Turbines		Turbine)
40 CFR 60.380, Subpart LL, Standards of	X	PC-01, CV-01A, CTS-01, CV-
Performance for Metallic Mineral Processing Plants		01C, SAG-F1, IC-01
NSPS 40 CFR 60.40, Subpart OOO, Standards of		
Performance for Nonmetallic Mineral Processing	X	Entire Facility
Plants		

<sup>\*\*</sup> The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	X	CB SCRN ENG, CH SCRN ENG (Screening Plant Engine)
40 CFR 63, Subpart A, General Provisions	X	Entire Facility
40 CFR 63, Subpart CCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	X	All GDFs
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	X	Cobre Emergency Generator Sets, CB SCRN ENG, CH SCRN ENG (Screening Plant Engine)
40 CFR 82, Subpart F, Protection of Stratospheric Ozone, Service, Maintenance and Repair of Air Conditioners	X	Entire Facility

B. Table 103.B lists requirements that are <u>not</u> applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

**Table 103.B:** Non-Applicable Requirements

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
20.2.1 NMAC General Provisions (Sampling		X	
Equipment, Severability, Effective Date, and Conflicts)		Λ	
20.2.2 NMAC Definitions		X	
20.2.3 NMAC Ambient Air Quality Standards	X		
20.2.5 NMAC Source Surveillance		X	
20.2.60 NMAC Regulation to Control Open Burning	X		
20.2.75 NMAC Permit Fees		X	
20.2.78 NMAC Hazardous Air Pollutants	X		
20.2.80 NMAC Stack Heights	X		
40 CFR 61, Subpart M, Asbestos	X		

<sup>(1)</sup> Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.

C. Compliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 0298-M5.

<sup>(2)</sup> No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

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## A104 Facility: Regulated Sources

A. Table 104 lists the emission units authorized for this facility. Emission units identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

**Table 104: Regulated Sources List** 

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
CB EGEN2	Cobre Mine Generator Set #2	Caterpillar, D399 PCTA	36Z01236	1300 HP, Diesel Engine	N/R
CB EGEN3	Cobre Mine Generator Set #3	Caterpillar, D399 PCTA	36Z01234	1300 HP, Diesel Engine	N/R
CB TLNGS	Cobre Mine Tailings Impoundment	N/A	N/A	N/A	N/R
CBM HR	Cobre Mine Hauling	N/A	N/A	N/A	N/R
СВМ МН	Cobre Mine Material Handling	N/A	N/A	N/A	N/R
CM BLST	Chino Mine Blasting	N/A	N/A	N/A	N/R
CM HR	Chino Mine Hauling	N/R	N/R	N/R	N/R
СМ МН	Chino Mine Material Handling	N/A	N/A	N/A	N/R
CM TLNGS	Chino Mine Tailings Impoundment	N/A	N/A	N/A	N/R
CTS-01	Conveyor Transfer (beneath PC-01)	NA	NA	NA	N/R
CV-01A	Coarse Ore Stockpile Conveyor, Flight #1	NA	NA	NA	6/13/1981
CV-01B	Coarse Ore Stockpile Conveyor, Flight #1	N/R	N/R	N/R	N/R
CV-01C	Coarse Ore Conveyer Transfer (between CV- 01A and CV- 01B)	unknown	unknown	unknown	N/R

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
F-1-3-2	Material Handling, Front End Loader	unknown	unknown	unknown	N/R
F-2-1-1.4	Westinghouse Gas Turbine	Westinghouse, W251B12	4658139	455 MMBtu.hr	1/1/2000
F-2-1-1.5	Heat Recovery Steam Generator	HRSG w/duct burner	N/R	48.8 MMBtu.hr	1/1/2000
F-2-2-1	Cooling Tower	Marley, 576-46-3	12-519-71	15000 gpm	1/1/1971
FLTR/BLND	Filer/Blending Plant	N/A	N/A	N/A	N/R
IC-01	Molybdenum Plant	Molybdenum Plant			8/13/2001
LHS-01 (IC-06)	Lime Handling System	Lime Handling System - Ivanhoe Concentrator			6/6/1980
LUS-01	Lime Unloading System	Lime Unloading System - Ivanhoe Concentrator			6/13/1981
PC DUMP	Primary Crusher Dump Pocket	unknown	unknown	unknown	N/R
PC-01	Primary Crusher	Primary Crusher			6/13/1981
SAG-F1 (IC-04)	SAG Mill Feeders	Concentrate Handling	N/A	N/A	6/13/1981
SCDP	Stacker Conveyor	N/R	N/R	N/R	N/R
CH SCRN	Screening Material Handling	PORTEC Kolberg	unknown	1,000 TPH	1/1/2007
CB SCRN	Screening Material Handling	TBD	unknown	300 TPH	TBD
CH SCRN ENG	Screening Plant Diesel Engine	Deutz, BF4M2012	N/A	96.5 HP	8/2006
CB SCRN ENG	Screening Plant Diesel Engine	TBD	N/A	175 HP	TBD
SXEW 10MST	SX/EW Plant Ten Mixer/settler Tanks	Mixer/Settler Tank		6-39,000 sqft & 4-39,400 sqft (±10%)	8/15/2000
SXEW Boiler No.1	SXEW Plant Water Boiler No.1	Lochinvar CBL1257	N/A	1.255MMBtu/hr	TBD
SXEW Boiler No.2	SXEW Plant Water Boiler No.2	Lochinvar CBL1257	N/A	1.255MMBtu/hr	TBD

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Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
SXEW RT	SX/EW Plant Raffinate Tank	SX/EW Plant Raffinate Tank		5,024 sqft (±10%)	8/15/2000
SXEW SAT	SXEW Plant Acid Tankhouse	N/A	N/A	N/A	N/R
GDF	Gasoline Dispensing Facilities	N/A	N/A	Each tank is <10,000 gal/yr	N/R

## A105 Facility: Control Equipment

A. Table 105.A lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

**Table 105.A:** Control Equipment List:

Control	Tor Equipment Eist.			
<b>Equipment Unit</b>		Pollutant being	Control for Unit	
No.	Control Description	controlled	Number(s) <sup>1</sup>	
MP SCRB	Moly Plant Wet Scrubber	TSP/PM/PM <sub>10</sub> /PM <sub>2.5</sub>	IC-01	
PCB H-01	Primary Crusher Baghouse	TSP/PM/PM <sub>10</sub> /PM <sub>2.5</sub>	PC-01	
CSLU-01	Lime Unloading System Wet	TSP/PM/PM <sub>10</sub> /PM <sub>2.5</sub>	LUS-01	
	Scrubber	10 2.0		
CSLH-01	Lime Handling System Wet	TSP/PM/PM <sub>10</sub> /PM <sub>2.5</sub>	LHS-01	
CSEII 01	Scrubber	151/1 141/1 141/0/1 1412.5		
	Recycle Crusher Baghouse (no			
RCB-01	emissions to atmosphere; vents	TSP/PM/PM <sub>10</sub> /PM <sub>2.5</sub>	Recycle Crusher	
	back into building)			

<sup>1</sup> Control for unit number refers to a unit number from the Regulated Equipment List

## B. Wet Scrubber (NSR Permit 0298M6, Condition A105.B)

**Requirement:** Units IC-01, LUS-01, and LHS-01 shall be controlled by the wet scrubbers.

**Monitoring** Except for periods of monitoring system breakdowns, repairs, maintenance, and calibration checks, Permittee shall continuously monitor: (1) the differential pressure (inches of water) across the wet scrubbers via a differential pressure gauge; and (2) the water flow rate (gallons per minute) into the scrubber via a flow meter while the associated process equipment is operating. Monitoring devices shall be maintained in good operating condition.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

**Reporting:** The Permittee shall report in accordance with Section B110.

#### C. Baghouse (NSR Permit 0298M6, Condition A105.C)

**Requirement:** Units PC-01 and Recycle Crusher shall be controlled by the baghouses.

**Monitoring:** Except for periods of monitoring system breakdowns, repairs, maintenance, and calibration checks, Permittee shall continuously monitor the differential pressure (inches of

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water) across the baghouses with a differential pressure gauge while the associated process equipment is operating. Monitoring devices shall be maintained in good operating condition.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

**Reporting:** The Permittee shall report in accordance with Section B110.

## **A106 Facility: Allowable Emissions**

A. The following table(s) list the emission units, and their allowable emission limits. (40 CFR 50, Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit 0298-M6).

**Table 106.A:** Allowable Emissions

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)
CB EGEN2	32.2	8.1	8.6	2.1	<	<	<	<	<	<	<	<	<	<
CB EGEN3	32.2	8.1	8.6	2.1	<	<	<	<	<	<	<	<	<	<
CB TLNGS									<	1.2	<	<	<	<
CBM HR									21.0	25.1	5.1	6.2	<	<
CBM MH									<	<	<	<	<	<
CM BLST	523.0	136.0	4617.0	1200.4			200.0	52.0						
CM HR									2219.0	7935.1	542.5	1940.1	54.3	194.0
CM MH									1.2	5.4	<	2.0	<	<
CM TLNGS									40.3	176.3	20.1	88.2	3.0	13.2
CV-01C									1.5	4.9	<	1.8	<	<
F-2-1-1.4	39.9	174.8	20.0	87.6	2.8	12.3	<	1.8	2.3	10.1	2.3	10.1	2.3	10.1
F-2-1-1.5	2.4	10.5	1.3	5.7	<	2.6	<	<	<	1.3	<	1.3	<	1.3
F-2-2-1									2.2	9.7	1.6	7.1	<	<
FLTR/BLN D <sup>4</sup>									<	<	<	<	<	<
GDF					<	<								
IC-01									<	1.4	<	1.4	<	1.4
LHS-01 (IC- 06)									<	<	<	<	<	<
LUS-01									<	<	<	<	<	<
PC DUMP									<	<	<	<	<	<
PC-01 <sup>3</sup>									2.2	9.5	2.2	9.5	2.2	9.5
SAG-F1 (IC-04)									1.5	4.9	<	1.8	<	<
SCDP <sup>2</sup>									<	1.6	<	<	<	<
CH SCRN									19.8	13.9	8.6	6.1	1.2	<
CB SCRN									3.7	4.3	1.5	1.8	<	<
CB SCRN ENG	1.2	2.5	1.0	2.2	0.5	1.1	0.4	0.9	0.5	1.0	0.5	1.0	0.5	1.0
CH SCRN ENG	1.0	3.6	0.1	0.5	0.02	0.1	0.2	1.0	0.2	1.0	0.2	1.0	0.2	1.0

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)
SXEW 10MST					<	1.3								
SXEW Boiler No.1	<	0.9	<	0.5	<	<	<	<	<	<	<	<	<	<
SXEW Boiler No.2	<	0.9	<	0.5	<	<	<	<	<	<	<	<	<	<
SXEW RT					<	<								
SXEW SAT											<	<		
TOTAL - Non- fugitive sources		209.2		101.3		16.7		3.7		34.4		31.7		24.4
TOTAL*- Fugitive & Non-fugitive sources		345.2		1301. 7		18.9		55.7		8208.0		2082. 0		234.8

- 1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.
- 2 Unit SCDP includes emissions from CV-01A Flight 1 and CV-01B Flight B.
- 3 Unit PC-01 includes emissions from CTS-01.
- 4 Unit FLTR/BLND includes emissions from Units CV-01-53, CV-02-53, CV-03, CV-04, CV-05, CV-06, and F-1-3-2
- 5 "-" indicates the application represented emissions of this pollutant are not expected.
- 6 "<" indicates the application represented uncontrolled emissions are less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions, except for flares and pollutants with controls
- 7 Totals are for information only and are not enforceable conditions.

Table 106.B: Performance Standards for Ivanhoe Concentrator Equipment

Unit	Grain Loading	Opacity
Molybdenum Plant (electric heat, w/ wet scrubber)	0.02 g/dscf	NA
PCB H-01 (Primary crusher baghouse)	0.02 g/dscf	7%
(CTS-01) Conveyer Transfer systems	NA	10%
SAG-F1 Mill Feeders	NA	10%

- B. NOx emissions from the turbine (Unit F-2-1-1.4) shall not exceed 184 ppmv at 15 percent oxygen on a dry basis. (40 CFR 60.332)
- C. SO<sub>2</sub> emissions from the turbine (Unit F-2-1-1.4) shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis, or shall not burn fuel which contains sulfur in excess of 0.8 percent by weight (8000 ppmw). (40 CFR 60.333)

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## A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM)

A. Allowable SSM emission limits are not imposed at this time. The Permittee shall maintain records in accordance with Condition B109.C, except the requirement to record the start and end times of SSM and Malfunction events shall not apply. SSM emissions have been incorporated into the steady-state emissions limits in Table 106.A.

## **A108** Facility: Hours of Operation

- A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting requirements are required to demonstrate compliance with continuous hours of operation unless otherwise stated in this permit.
- B. Operating Hours for Units CB EGEN2, CB EGEN3, CB SCRN ENG, and CH SCRN ENG (NSR Permit 0298M6, Condition A108.B)

**Requirement:** The emission limits for these units were based on reduced hours of operation, CB EGEN2 500 hours per year, CB EGEN3 500 hours per year, CH SCRN ENG 7,000 hours per year, and CB SCRN ENG 4380 hours per year. To demonstrate compliance with the allowable emission limits, the Permittee shall restrict the operating hours for these units to the above listed hours.

**Monitoring:** The Permittee shall monitor the operating hours of each engine. For engines without a non-resettable hour meter, the monitoring data shall include the date, start time, and end time of each operating period. For engines equipped with a non-resettable hour meter, the monitoring data shall be the cumulative run time of the engine.

**Recordkeeping:** The Permittee shall record the meter reading for each unit starting January 1 and within the first 15 days of each calendar month, the Permittee shall calculate the prior month's total operating hours for each engine above. During the first 12 months of monitoring, the permittee shall calculate a monthly running total of operating hours of reach engine. After the first 12 months of monitoring, the Permittee shall then calculate the monthly- rolling 12-month total operating hours for each engine.

**Reporting:** The Permittee shall report in accordance with Section B110.

C. Cobre Mine Throughput: - Magnetite Production Limits (Unit CBM MH) (NSR Permit 0298M6, Condition A108.C)

**Requirement:** The total material handling of magnetite at the Cobre Mine shall not exceed 2,700 tons per day and 600,000 tons/yr. This operation is authorized to operate 24-hours per day. This production rate was specified in the permit application and is the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall monitor the daily process rate of the Cobre Mine while the process is in operation.

**Recordkeeping:** The Permittee shall produce production records upon request. The records can be computer generated or hand written summaries supported by the data.

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When requested, the Permittee shall produce a record that includes the date and:

- a record of the daily production rate,
- during the first 12 months of monitoring, the permittee shall calculate a monthly running total of production rate,
- after the first 12 months of monitoring, a record of the monthly rolling 12-month total production rate.

**Reporting:** The Permittee shall maintain the ability to generate a report from the information collected. This report shall be generated upon request.

The Permittee shall report in accordance with Section B110.

D. Chino Mine Throughput: - Copper Ore Production Limits (Unit CM MH) (NSR Permit 0298M6, Condition A108.D)

**Requirement:** The production rate of material mined from the Santa Rita Pit and delivered to Stockpiles shall not exceed the limits shown in Table 108.D below. This operation is authorized to operate 24-hours per day. This production rate was specified in the permit application and is the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall monitor the amount of material mined from the Santa Rita Pit and delivered to each Stockpile daily.

**Recordkeeping:** The Permittee shall maintain the ability to produce production records upon request. The records can be computer generated or hand written summaries supported by the data. When requested, the Permittee shall produce a record that includes the emission activity name, date, and:

- a record of the daily production rate,
- during the first 12 months of monitoring, the permittee shall calculate a monthly running total of production rate,
- after the first 12 months of monitoring, a record of the monthly rolling 12-month total production rate.

**Reporting:** The Permittee shall maintain the ability to generate a report from the information collected. This report shall be generated upon request.

**Table 108.D, Maximum Mine Material Throughput** (1)

Emissions Activity	tons/day	tons/yr
Material Handling - Santa Rita Pit	350,000	127,750,000
Unloading - Lampbright Leach Stockpile	250,000	91,250,000
Unloading - South Waste + South Leach Stockpiles	250,000	91,250,000
Unloading - West Waste Stockpile <sup>2</sup>	80,000	30,000,000

- (1) (1) The mine plan is constantly in flux, and the forecast tonnages can change month to month.
- (2) Limits were reduced so TSP modeling would meet AAQS for NSR Permit 0298M6.

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## A109 Facility: Reporting Schedules

A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on July 1<sup>st</sup> and January 1<sup>st</sup> of each year.

B. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on July 1<sup>st</sup> of each year.

## A110 Facility: Fuel Sulfur Requirements

A. Facility Wide (NSR Permit 0298M6, Condition A110.A)

**Requirement:** The Turbine, Unit F-2-1-1.4 and HRSG, Unit F-2-1-1.5, shall combust only pipeline quality natural gas as defined in this permit. The SXEW Boilers No. 1 and 2 shall combust only propane. The generators (Units CB EGEN2, CB EGEN3, CB SCRN ENG and CH SCRN ENG) shall combust only low sulfur diesel fuel. The sulfur content of the fuel oil shall not exceed 0.05% sulfur by weight.

**Monitoring:** None

**Recordkeeping:** The Permittee shall demonstrate compliance with the natural gas or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract, or vendor certification for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel. If fuel gas analysis is used, the analysis shall not be older than one year.

**Reporting:** The Permittee shall report in accordance with Section B110.

## A111 Facility: 20.2.61 NMAC Opacity

A. For Units SXEW Boilers 1 & 2, F-2-1-1.4 and F-2-1-1.5 (NSR Permit 0298M6, Condition A111.A)

**Requirement:** Units shall only combust pipeline quality natural gas or natural gas liquids and emissions from the combustion units shall not exceed 20% opacity.

**Monitoring:** Use of natural gas or natural gas liquids constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC

**Recordkeeping:** The Permittee shall record dates of any opacity measures and the corresponding opacity readings.

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B. For Units CB EGEN2, CB EGEN3, CB SCRN ENG and CH SCRN ENG (NSR Permit 0298M6, Condition A111.B)

**Requirement**: Emission from combustion units shall not exceed 20% opacity. Units CB EGEN2, CB EGEN3, CB SCRN ENG and CH SCRN ENG shall be fueled only with diesel.

**Monitoring:** Once per calendar quarter, an opacity measurement shall be performed on each Unit for a minimum of 10 minutes in accordance with the procedures of 40 CFR 60, Appendix A, Method 9.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109 of each unit, any visible emission events during steady state operations (date, time, and the corresponding opacity measurements) and the quarterly corresponding opacity measurements. For units burning diesel fuel, certification of grade and characteristics as stated in permit application for fuel used during the period shall be recorded and maintained. The record shall note if an opacity measurement was not conducted because the engine did not operate during that calendar quarter.

**Reporting:** The Permittee shall report in accordance with Section B110.

## A112 Facility: Haul Roads

A. Haul Roads Cobre Mine (Unit CBM HR) (NSR Permit 0298M6, Condition A112.A)

**Requirement:** Fugitive emissions from vehicles traveling on haul roads at the Cobre Mine shall not exceed 25.1 tons per year TSP and 6.2 tons per year  $PM_{10}$  on a monthly –rolling 12-month basis. Emissions will be calculated using vehicle miles travelled and emission factors from AP-42. This operation is authorized to operate 24-hours per day. The TSP and  $PM_{10}$  potential to emit values were specified in the permit application and is the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall monitor vehicle miles travelled on Cobre Mine haul roads for haul trucks and over-the-road trucks.

- Within the first 15 days of each calendar month, the Permittee shall calculate the prior month's total vehicle miles travelled.
- During the first 12 months of monitoring, the permittee shall calculate a monthly running total of fugitive emissions of TSP and PM10.
- After the first 12 months of monitoring the Permittee shall then calculate the monthly-rolling 12-month total fugitive emissions of TSP and  $PM_{10}$ .

**Recordkeeping:** The Permittee shall keep monthly records of the total vehicle miles travelled by haul trucks and over-the-road trucks on Cobre Mine haul roads and the calculated fugitives.

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## B. Haul Roads Chino Mine (Unit CM HR) (NSR Permit 0298M6, Condition A110.B)

**Requirement:** Fugitive emissions of TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> from vehicles travelling on haul roads at the Chino Mine shall not exceed the limits established in Table 106.A on a monthly-rolling 12-month basis. Emissions will be calculated using vehicle miles travelled and emission factors from AP-42. This operation is authorized to operate 24-hours per day.

The TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> potential to emit values were specified in the permit application and are the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall monitor vehicle miles travelled on Chino Mine haul roads.

- Within the first 15 days of each calendar month, the Permittee shall calculate the prior month's total vehicle miles travelled by haul trucks and estimate the total vehicle miles travelled by other vehicles (i.e. passenger/maintenance/delivery) travelling on haul roads.
- During the first 12 months of monitoring, the permittee shall calculate a monthly running total of fugitive emissions of TSP, PM<sub>10</sub>, and PM<sub>2.5</sub>.
- After the first 12 months of monitoring, the Permittee shall then calculate the monthly-rolling 12-month total fugitive emissions of TSP, PM<sub>10</sub>, and PM<sub>2.5</sub>.

**Recordkeeping:** The Permittee shall keep monthly records of the total vehicle miles travelled by haul trucks and other vehicles (i.e. passenger/maintenance/delivery) travelling on haul roads and the calculated Fugitive emissions.

**Reporting:** The Permittee shall report in accordance with Section B110.

## C. Haul Road Control throughout Cobre and Chino Mines (NSR Permit 0298M6, Condition A110.C)

**Requirement:** Truck traffic areas and haul roads at the Cobre Mine and Chino Mine shall be watered <u>and</u> treated by application of base course or other equally effective measures to control particulate emissions. The Permittee shall obtain NMED approval of any "equally effective measures to control particulate emissions".

Control measures shall be implemented when visible emissions are observed at the height of standard haul truck headlights.

These control measures shall be used on unpaved roads as far as the nearest public road.

**Monitoring:** The Permittee shall conduct daily monitoring of truck traffic areas and haul roads for the presence of adequate moisture, base course, and/or other measures to minimize fugitive particulate emissions. Daily monitoring and application of control measures are not required for areas covered by snow or ice, or if precipitation has occurred that is sufficient to control particulate emissions.

**Recordkeeping:** The Permittee shall keep daily records of the monitoring inspections and will document the location(s) of water application or equivalent control measures, if such measures are required to control fugitive particulate emissions. The records shall indicate if the daily inspection revealed no areas requiring additional control measures.

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#### A113 Facility: 40 CFR 82, Subpart F

A. Protection of Stratospheric Ozone, Service, Maintenance and Repair of Air Conditioners

**Requirement:** The facility operates and maintains air conditioning systems and is subject to the Subpart F standards for recycling and emissions reductions during maintenance, service, repair, or disposal of appliances.

**Monitoring:** The Permittee shall comply with the applicable monitoring requirements of 40 CFR 82, Subpart F.

**Recordkeeping:** The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 82, Subpart F.

**Reporting:** The Permittee shall comply with the applicable reporting requirements of 40 CFR 82, Subpart F.

## **EQUIPMENT SPECIFIC REQUIREMENTS**

## OIL AND GAS INDUSTRY

#### **A200** Oil and Gas Industry (not required)

A. This section has common equipment related to most Oil and Gas Operations.

#### **CONSTRUCTION INDUSTRY**

#### A300 Construction Industry – Aggregate

A. This section has common equipment related to most Crusher/Screening Operations.

## **A301** Equipment Substitutions

(NSR Permit 0298M6, Condition A301)

- A. Substitution of aggregate handling equipment is authorized provided the replacement equipment is functionally equivalent and has the same or lower process capacity as the piece of equipment it is replacing in the most recent permit. The replacement equipment shall comply with the opacity requirements in this permit.
- B. The Department shall be notified within fifteen (15) days of equipment substitutions using the Equipment Substitution Form provided by the Department and available online.

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## C. Chino Mine Screening Production Limits, (Unit CH SCRN)

**Requirement:** The process rate of the Chino Screening Plant shall not exceed 1000 tons per hour and a monthly-rolling 12-month total of 1,404,000 tons per year. This production rate and configuration were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall monitor:

- (1) Daily tons of material processed;
- (2) Daily hours of operation;
- (3) Using the information above, during the first 12 months of monitoring, calculate a monthly running total of production, and after the first 12 months of monitoring a monthly rolling 12 month total of production and monitor the tons per year emission rates to ensure compliance with the allowable TSP and PM<sub>10</sub> emission rates shown in Table 106.A for the Unit CH SCRN.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

**Reporting:** The Permittee shall report in accordance with Section B110.

## D. Generator limits for Chino Screening Operation (Unit CH SCRN ENG)

**Requirement:** The generator pound per hour NOx, CO and SO<sub>2</sub> emissions shall not exceed those shown in Table 106.A. The total hours of operation shall not exceed 7,000 hours per year. The hourly emission rate limit and hours of operation were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall obtain the engine emission specifications provided by the engine manufacturer to calculate the individual emission rates in pounds per hour for NOx, CO and SO<sub>2</sub> to ensure that emissions limits are not exceeded. The Permittee shall monitor the daily operating hours of the generator being used to provide power to the screening operation. During the first 12 months of monitoring, the permittee shall calculate a monthly running total of engine operating hours. After the first 12 months of monitoring the permittee shall calculate a monthly-rolling 12-month total of engine operating hours.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

**Reporting:** The Permittee shall report in accordance with Section B110.

## E. 40 CFR 60, Subpart IIII (Units CH SCRN ENG, CB SCRN ENG)

**Requirement:** The units are subject to 40 CFR 60, Subparts A and IIII and shall comply with the notification requirements in Subpart A and the specific requirements of Subpart IIII.

**Monitoring:** The Permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4211.

**Recordkeeping:** The Permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4214.

**Reporting:** The Permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4214.

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## **A302 Screening Operations for Cobre Mine**

(NSR Permit 0298M6, Condition A302)

#### A. Cobre Screening Production Limits (Unit CB SCRN)

**Requirement:** The process rate of a Cobre Mine screening plant, whether it is a contractor-owned plant or a Chino-owned plant, shall not exceed 300 tons per hour or 700,000 tons per year and shall only operate in daylight hours. This production rate and configuration were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall monitor:

- (1) Daily tons of material processed;
- (2) Daily hours of operation;
- (3) Daily water application to meet emission limits;
- (4) The plant layout/configuration showing the number of material drops;
- (5) Using the information above, calculate and monitor the tons per year emission rates to ensure compliance with the allowable TSP and  $PM_{10}$  emission rates shown in Table 106.A.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

**Reporting:** The Permittee shall report in accordance with Section B110.

## B. Generator limits for Screening Plant (CB SCRN ENG)

**Requirement:** The generator pound per hour NOx, CO and SO<sub>2</sub> emissions shall not exceed those shown in Table 106.A. The total hours of operation shall not exceed 4,380 hours per year. The hourly emission rate limit and hours of operation were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.

**Monitoring:** The Permittee shall obtain the engine emission specifications provided by the engine manufacturer to calculate the individual emission rates in pounds per hour for NOx, CO and  $SO_2$  to ensure that the emissions limits are not exceeded. The Permittee shall monitor the daily operating hours of the engine used to provide power to the screening operation.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

**Reporting:** The Permittee shall report in accordance with Section B110.

#### A303 NSPS Subpart OOO Affected Equipment

(NSR Permit 0298M6, Condition A303)

- A. The owner or operator of a 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671) shall meet the following fugitive emission limits (40 CFR 60, Subpart OOO, Table 3) for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.
  - (1) 10% opacity for affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008.

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(2) 7% opacity for affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008.

- B. The owner or operator of a 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671) shall meet the following fugitive emissions limit (40 CFR 60, Subpart OOO, Table 3) for crushers at which a capture system is not used.
  - (1) 15% opacity for affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008.
  - (2) 12% opacity for affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008.
- C. The Permittee shall conduct an initial compliance test of each 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671), in accordance with the requirements of 40 CFR §§60.672 & 675 and Condition B111.
- D. The Permittee shall comply with the applicable monitoring requirements of a 40CFR 60 Subpart OOO affected facility (60.670 & 671) as required by 40CFR 60.674.

#### A304 Non-NSPS Affected Equipment

(NSR Permit 0298M6, Condition A304)

A. For equipment not subject to any NSPS requirement and their emission calculation relied upon emission factors using controls, particulate emissions from *non-NSPS* affected transfer points, belt conveyors, and screens, shall not exhibit greater than 10% opacity. Particulate emissions from *non-NSPS* crushers shall not exhibit greater than 15% opacity.

B. Ongoing material handling opacity testing

**Requirement:** The Permittee shall demonstrate ongoing compliance with the opacity limits of this permit.

**Monitoring:** The Permittee shall perform a 6-minute opacity reading for each crusher, screen and stacker conveyor (material drop to storage pile) at least once per calendar month in which the facility operates. If requested by the Department in writing, the Permittee shall perform additional monthly testing on each transfer conveyor as required above. The test will be used to demonstrate compliance with the opacity limitations in this permit. The test shall be done at the normal operational load of the facility. Compliance with this condition shall be determined by opacity test observations conducted in accordance with Reference Method 9 in 40 CFR Part 60, Appendix A.

Method 22 in 40 CFR Part 60, Appendix A may be used in place of Method 9 if the applicant can demonstrate no visible emissions during the 6-minute visual emissions test. If visible emissions are observed, then the Permittee shall use Method 9.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109.

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## C. Daily inspection of water sprays

**Requirement:** If water sprays are installed, the Permittee shall inspect the water sprays to insure that they are functioning properly (including, but not limited to spray bars are pointing in the right places, are not blocked or plugged, and are atomizing the water properly).

**Monitoring:** Within two hours of startup of each calendar day, the Permittee shall inspect the water sprays to insure they are controlling fugitive dust emissions.

**Recordkeeping:** A daily record shall be made of the inspection and any maintenance activity that resulted from the inspection. At a minimum, the record shall include the date, time, name of individual conducting the inspection, a description of any malfunction, and any corrective actions taken. The record shall be attached to a description of what shall be inspected, to ensure the inspector understands his or her responsibilities.

**Reporting:** The Permittee shall report in accordance with Section B110.

#### **POWER GENERATION INDUSTRY**

## **A400 Power Generation Industry**

A. This section has common equipment related to most Electric Service Operations (SIC-4911).

## **A401 Turbines and HRSG**

A. Maintenance and Repair (Unit F-2-1-1.4 (turbine) and F-2-1-1.5 (HRSG))

**Requirement:** To comply with the allowable emission limits, the units shall be maintained to minimum manufacturer's or Permittee's recommended maintenance schedule to ensure good combustion practices.

## **Monitoring:**

Maintenance and repair shall meet the minimum manufacturer's or Permittee's recommended maintenance schedule. Maintenance and repair activities that involve adjustment, replacement, or repair of functional components with the potential to affect operation of an emission unit shall be documented as they occur for the following events.

- (a) Routine Maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.
- (b) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.

**Recordkeeping**: The Permittee shall record the maintenance and repair activities and the record shall include identification of emission units and the work involved.

**Reporting:** The Permittee shall report in accordance with Section B110.

B. Periodic Emissions Tests (Unit F-2-1-1.4 (turbine) and F-2-1-1.5 (HRSG))

**Requirement:** The Permittee shall comply with the allowable emission limits listed in Table 106.A.

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**Monitoring:** The Permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NOx and CO, emissions tests shall be carried out as described below. Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

- (a) The test period shall be annually, period starting on January 1.
- (b) The first test shall occur within the first monitoring period occurring after permit issuance.
- (c) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- (d) Follow the General Testing Procedures of Section B111.
- (e) The power plant can operate in simple cycle mode (turbine only exhaust stack) or in combined cycle mode (turbine + HRSG exhaust stack). Testing will be conducted on the exhaust stack for which the power plant is configured at the time of testing. It is not necessary to change the power plant configuration from simple cycle mode to combined cycle mode or from combined cycle mode to simple cycle mode merely to conduct the testing. If the power plant configuration is changed for operational reasons since the last testing was conducted, testing on the new configuration shall be conducted within 90 days of changing the configuration.

**Recordkeeping:** The Permittee shall maintain records in accordance with Section B109. The Permittee shall also record the results of the periodic emissions tests, including the turbine's and HRSG's fuel flow rate and turbine's power output at the time of the test, and the type of fuel fired (natural gas, field gas, etc.).

If a combustion analyzer is used to measure NOx, CO, and/or excess air in the exhaust gas, records shall be kept of the make and model of the instrument and instrument calibration data. If an ORSAT apparatus or other gas absorption analyzer is used, the Permittee shall record all calibration results.

The Permittee shall also keep records of all raw data used to determine exhaust gas flow and of all calculations used to determine flow rates and mass emissions rates.

**Reporting:** The Permittee shall report in accordance with Section B110.

## C. 40 CFR 60, Subpart GG (Unit F-2-1-1.4)

**Requirement:** The unit is subject to 40 CFR 60, Subpart GG and the Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart GG.

**Monitoring:** The Permittee shall comply with the applicable monitoring and testing requirements of 40 CFR 60.334 and 60.335. To comply with the fuel monitoring requirements of NSPS Subpart GG, the Permittee may use the custom fuel monitoring schedule contained in Attachment A. However, if the conditions of the custom schedule cannot be met, the Permittee shall revert to the fuel monitoring requirements of NSPS Subpart GG, 60.334(h).

**Recordkeeping:** The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.334 and 40 CFR 60.7.

**Reporting:** The Permittee shall comply with the reporting requirements of 40 CFR 60.7.

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## D. 40 CFR 60, Subpart Dc (Unit F-2-1-1.5)

**Requirement:** The unit is subject to 40 CFR 60, Subpart Dc and the Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart Dc.

**Monitoring:** The Permittee shall comply with the applicable monitoring requirements of 40 CFR 60.48c.

**Recordkeeping:** The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.48c and 40 CFR 60.7.

**Reporting:** The Permittee shall comply with the reporting requirements of 40 CFR 60.7.

## SOLID WASTE DISPOSAL (LANDFILLS) INDUSTRY

## A500 Solid Waste Disposal (Landfills) Industry- Not Required

## MINING INDUSTRY

#### **A600 Mining Operations Introduction**

A. This section has common equipment related to most mining Operations.

#### **A601 Ivanhoe Concentrator**

## A. Units PC-01 (NSR Permit 0298M6, Condition A601.A)

**Requirement:** At the Ivanhoe Concentrator, the production rate of the concentrating circuit shall not exceed an annual average of 60,000 tons per day. The maximum single hourly production rate through the concentrator circuit shall not exceed 3,300 tons per hour. The maximum daily throughput for the crusher system shall not exceed 80,640 tons per day.

**Monitoring:** The Permittee shall monitor the process rate of the Primary Crusher and Ivanhoe Concentrator. The information monitored shall include the unit identification number, date, and the process rates.

**Recordkeeping:** The Permittee shall maintain the ability to produce production records upon request. The records can be computer generated or hand written summaries supported by the data.

When requested, the Permittee shall produce a record that includes the date, time, and:

- the daily (24-hour calendar day) production rate for the Primary Crusher,
- the hourly production rate for the Ivanhoe Concentrator and
- the daily-rolling 365-day average production rate for Ivanhoe Concentrator.

**Reporting:** The Permittee shall maintain the ability to generate a report from the information collected. This report shall be generated upon request. The Permittee shall report in accordance with Section B110.

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## B. 40CFR60, Subpart LL (Units PC-01, CV-01B, CTS-01, CV-01C, SAG-F1, IC-01)

**Requirement:** 40 CFR 60, Subpart LL applies only to the specified Ivanhoe Concentrator affected facilities listed above. For an affected facility using a wet scrubber, the scrubber shall be equipped with pressure gauges to measure pressure drop across the control device. Wet scrubbing systems shall be equipped with a continuous monitoring device to measure the scrubbing liquid flow rate. Pressure gauges and monitoring devices shall be installed, calibrated, maintained, and operated in accordance with the manufacturer specifications. Compliance with this will be based on Department inspections of the facility to verify that instruments have been installed and of the records as set forth in 40CFR60, Subpart LL.

**Monitoring:** The Permittee shall comply with the applicable monitoring requirements of 40 CFR 60, Subpart LL.

**Recordkeeping:** The Permittee shall comply with the applicable notification and record keeping requirements as set forth in 40CFR60, Subpart LL shown here:

- a) The Owner/Operator shall submit a written report of the results of the performance tests as specified in 40 CFR §60.8(a).
- b) The Owner/Operator shall record the measurements of change in pressure of the gas stream across the scrubber and scrubbing fluid flow rate weekly.

The Owner/Operator shall submit semiannual reports of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than  $\pm 30$  % from the average obtained from the most recent performance test. These reports shall be postmarked within 30 days following the end of June and December.

**Reporting:** The Permittee shall submit reports as required by 40CFR60, Subpart A and/or Subpart LL.

## **A602 Chino Mine Blasting Operations**

## A. Chino Mine Blasting (Unit CM BLST) (NSR Permit 0298M6, Condition A602.A)

**Requirement:** The Permittee shall not exceed the consumption of ammonium nitrate blasting agents of fifty-two thousand (52,000) tons per year in the blasting operation and four hundred thousand (400,000) pounds per day. These values and the emission factors for blasting agents are from "A Technique for Measuring Toxic Gases Produced by Blasting Agents", from the Proceedings of the 23rd Annual Conference on Explosives and Blasting Technique, (Las Vegas, NV, Feb. 2-5, 1997) and AP-42, Chapter 13.3, Explosives Detonation (February 1980, reformatted January 1995), Table 13.3-1, and are the basis for emission calculations for mine fugitives (blasting). Blasting shall only occur during daylight hours as defined at C101.A.

**Monitoring:** Monitor the use of explosives to ensure the tons per year and pounds per day limits are not exceeded. To demonstrate compliance during, the first 12 months of monitoring, each month the permittee shall calculate the cumulative total consumption of ammonium nitrate blasting agents, and after the first 12 months of monitoring the Permittee shall calculate and sum the total consumption of tons of ammonium nitrate blasting agents on a monthly rolling 12 month basis.

**Recordkeeping:** The Permittee shall keep records of the amount of ammonium nitrate blasting agents used every month, and the resulting fugitive emissions. These records shall

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show the monthly total and monthly rolling total during the first 12 months of monitoring and the monthly rolling 12 month total after the first 12 months of monitoring.

**Reporting:** The Permittee shall report in accordance with Section B110.

## **A603** Gasoline Dispensing Facilities (GDF)

## A. 40 CFR 63, Subpart CCCCCC, Gasoline Dispensing Facilities (Unit GDF)

**Requirement:** Each GDF is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. The GDFs are subject to 40 CFR 63, Subparts A and CCCCCC and each GDF has a monthly throughput less than 10,000 gallons of gasoline, therefore, the Permittee must comply with the requirements in §63.11116.

**Monitoring:** The Permittee shall comply with all applicable monitoring requirements in 40 CFR 63, Subpart A and Subpart CCCCCC, including but not limited to 63.11116.

**Recordkeeping:** The Permittee shall comply with all applicable recordkeeping requirements in 40 CFR 63, Subpart A and Subpart CCCCCC, including but not limited to 63.11116.

**Reporting:** The Permittee is not subject to the reporting or notification requirements in 40 CFR 63, Subpart A and Subpart CCCCCC.

## **A604** Combustion Equipment – Boilers, Engines

## A. 40 CFR 63, Subpart ZZZZ (Units CB EGEN2 & CB EGEN3)

**Requirement:** These units are subject to 40 CFR 63, Subpart ZZZZ and the Permittee shall comply with all applicable requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.

**Monitoring:** The Permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.

**Recordkeeping:** The Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.

**Reporting:** The Permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10.

## A605 Solvent Extraction – Electro-winning (SX/EW) Plant

(NSR Permit 0298M6, Condition A605)

- A. The source consists of ten covered mixer/settler tanks (Unit SXEW 10MST), six for extraction (surface area of 39,000 sqft ±10%) and four for stripping (surface area of 39,104 sqft ±10%), an open 900,000 gallon raffinate tank (Unit SXEW RT with a surface area of 5,024 sqft ±10%), an open 2 million gallon acid tankhouse (Unit SXEW SAT) and two water boilers (Units SXEW Boiler No.1 and 2).
- B. The Department approves of the emissions estimates that were based on the study, BHP Copper Quantification of Volatile Organic Compound Emissions From The Solution Extraction Process (BHP Method). The physical conditions of this facility must be similar

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to those described in the study. Specifically, the mixer/settler tanks shall be covered in order to minimize the velocity of air flow across the liquid surface of the tanks.

## C. Units SXEW 10MST, SXEW RT, and SXEW SAT

**Requirement:** The Permittee shall use any combination of the following products: Acorga M5910, M5640, OR25, COGNIS LIX684N-LV, as the extraction reagent, and Penreco 170ES, Escaid 110, Escaid 115 as the organic diluent, or equivalents approved in accordance with Section B110.C(2).

**Monitoring:** The Permittee shall monitor the types of the diluent and extraction reagent used and the dates any changes are made.

**Recordkeeping:** In accordance with Section B109 of this permit the operating logs and records of the following information shall be kept for each diluent and extraction reagents:

- a) The diluent and extraction reagent types used, Material Safety Data Sheets (MSDS), and the dates any changes are made between diluents and extraction reagents allowed by this permit.
- b) The composition, including but not limited to the molecular weight, HAP constituents, vapor pressure and diffusivity coefficient.
- c) The Permittee shall certify that no thresholds of New Mexico Toxic Air Pollutants (20.2.72.400 NMAC) are exceeded in the compounds.

**Reporting:** Reporting and product approval shall be in accordance with Section B110.C.

**Compliance Testing:** No compliance tests are required for the VOC and HAPS emissions at this facility. The Department accepts the validity of the BHP Method and its application to the estimation of emissions from this facility. Duplication of the physical conditions (covered mixer/settler tanks) and adjustment for the differences in the composition of diluent and extraction reagent is accepted in lieu of physical testing.

#### **A606** Fugitive Dust

#### A. Fugitive Dust Control Plan (FDCP) (NSR Permit 0298M6, Condition A606.A)

**Requirement:** The Permittee shall develop a Fugitive Dust Control Plan (FDCP) within 90-days of permit issuance for minimizing emissions from areas such as aggregate feeders, bins, bin scales, storage pile, overburden removal, disturbed earth, buildings, truck loading/unloading, active pits, or tailing impoundments (Units CBM TLNGS and CM TLNGS) that are not subject to 40 CFR 60, Subpart LL.

For example: Sites of overburden removal and active pit areas shall be watered, dependent on existing wind speeds and soil moisture content, as necessary to minimize dust emissions. Or, stock piles shall be maintained with standard industry practices and procedures to minimize fugitive emissions to the atmosphere.

**Monitoring:** Once each calendar month, the Permittee shall inspect each area to ensure that fugitive dust is being minimized and determine if the FDCP plan needs updating.

**Recordkeeping:** Monthly, the Permittee shall make a record of each monthly inspection and revise the plan to address past shortcomings as well as future activities. If no changes are needed, then the Permittee shall make a record that the plan needs no changes.

The Permittee shall make a record of any action taken to minimize emissions as a result of the FDCP or monthly inspections.

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## PART B GENERAL CONDITIONS

## B100 Introduction

A. Not Applicable

#### B101 Legal

- A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)
  - (1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the Federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the Federal Act. (20.2.70.302.A.2.a NMAC)
  - (2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)
    - (a) The Department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.
    - (b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.
  - (3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)

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(4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)

- (5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)
- (6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)
- (7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)
- (8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)
- (9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or Federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)
- (10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)
- (11) A responsible official (as defined in 20.2.70.7.AD NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)
- (12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)
- (13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)
- B. Permit Shield (20.2.70.302.J NMAC)

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(1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table 103.A. The requirements in Table 103.A are applicable to this facility with specific requirements identified for individual emission units.

- (2) The Department has determined that the requirements in Table 103.B as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.
- (3) This permit shield does not extend to administrative amendments (Subsection A of 20.2.70.404 NMAC), to minor permit modifications (Subsection B of 20.2.70.404 NMAC), to changes made under Section 502(b)(10), changes under Paragraph 1 of subsection H of 20.2.70.302 of the Federal Act, or to permit terms for which notice has been given to reopen or revoke all or part under 20.2.70.405 and 20.2.70.302J(6).
- (4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)
- C. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.7.109, 20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC) The establishment of allowable malfunction emission limits does not supersede this requirement.

## B102 Authority

- A. This permit is issued pursuant to the federal Clean Air Act ("Federal Act"), the New Mexico Air Quality Control Act ("State Act") and regulations adopted pursuant to the State and Federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) Operating Permits.
- B. This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.
- C. The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)
- D. Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States

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Environmental Protection Agency ("EPA") and citizens under the Federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the Federal Act. (20.2.70.302.A.5 NMAC)

E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the Modification and Exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

## **B103** Annual Fee

A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

## **B104** Appeal Procedures

(20.2.70.403.A NMAC)

A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board 1190 St. Francis Drive, Runnels Bldg. Rm N2153 P.O. Box 5469 Santa Fe, New Mexico 87502

## **B105** Submittal of Reports and Certifications

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to <a href="Stacktest.AQB@state.nm.us">Stacktest.AQB@state.nm.us</a>.
- B. Excess Emission Reports shall be submitted electronically to eereports.aqb@state.nm.us. (20.2.7.110 NMAC)

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C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Manager, Compliance and Enforcement Section New Mexico Environment Department Air Quality Bureau 1301 Siler Road, Building B Santa Fe, NM 87507-3113

D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section US EPA Region-6, 6EN-AA 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

## B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart. (20.2.70.302.A.1 and A.4 NMAC)

## B107 Startup, Shutdown, and Maintenance Operations

A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (20.2.7.14.A NMAC)

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## **B108** General Monitoring Requirements

(20.2.70. 302.A and C NMAC)

A. These requirements do not supersede or relax requirements of federal regulations.

- B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring period exemptions at B108.D(2), hours of operation shall be monitored and recorded.
  - (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
  - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
  - (3) If invoking the monitoring period exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.

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E. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition B108.

- F. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.
- G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- H. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance. All monitoring periods, unless stated otherwise in the specific permit condition or federal requirement, shall commence at the beginning of the 12 month reporting period as defined at condition A109.B.

## **B109** General Recordkeeping Requirements

(20.2.70.302.D NMAC)

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is (20.2.70.302.D.1 NMAC):
  - (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
  - (2) date(s) and time(s) of sampling or measurements;
  - (3) date(s) analyses were performed;
  - (4) the company or entity that performed the analyses;
  - (5) analytical or test methods used;

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- (6) results of analyses or tests; and
- (7) operating conditions existing at the time of sampling or measurement.
- B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)
- C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)
- D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)
- E. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
  - (1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)
  - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.
  - (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard.

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The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized limit.

## **B110** General Reporting Requirements

(20.2.70.302.E NMAC)

- A. Reports of required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.
- B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)
- C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:
  - (1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)
  - (2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).
- D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.
- E. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- F. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.

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G. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.

- H. The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. (20.2.73 NMAC and 20.2.70.302.A.1 NMAC)
- I. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
  - (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
  - (2) The permittee and department shall attach each such notice to their copy of the relevant permit.

## **B111** General Testing Requirements

## A. Compliance Tests

- (1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be reimposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

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(4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.

- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

#### B. EPA Reference Method Tests

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of 40 CFR 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by 40 CFR 60, Appendix A:
  - (a) Methods 1 through 4 for stack gas flowrate
  - (b) Method 5 for TSP
  - (c) Method 6C and 19 for SO<sub>2</sub>
  - (d) Method 7E for NO<sub>X</sub> (test results shall be expressed as nitrogen dioxide (NO<sub>2</sub>) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO<sub>2</sub> is equivalent to 1.194 x 10-7 lb/SCF)
  - (e) Method 9 for opacity
  - (f) Method 10 for CO
  - (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
  - (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
  - (i) Method 29 for Metals
  - (j) Method 201A for filterable  $PM_{10}$  and  $PM_{2.5}$
  - (k) Method 202 for condensable PM
  - (1) Method 320 for organic Hazardous Air Pollutants (HAPs)
  - (m) Method 25A for VOC reduction efficiency
- (2) Alternative test method(s) may be used if the Department approves the change.

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## C. Periodic Monitoring and Portable Analyzer Requirements

(1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.

- (2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes.
  - Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.
- (3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.F.
- (4) During emissions tests, pollutant, O<sub>2</sub> concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

#### D. Test Procedures:

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test to afford a representative of the Department an opportunity to be present at the test. (40CFR 60.8(d))
- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.

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(6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

(7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

## **B112** Compliance

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)
- D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at email:reportsgroup.aqb@state.nm.us. For additional reporting guidance see <a href="http://www.nmenv.state.nm.us/aqb/enforce\_compliance/TitleVReporting.htm">http://www.nmenv.state.nm.us/aqb/enforce\_compliance/TitleVReporting.htm</a>. (20.2.70.302.E.3 NMAC)

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E. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):

- (1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;
- (2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;
- (3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and
- (4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the Federal Act.

## **B113** Permit Reopening and Revocation

- A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A(3) or A(4) occurs. (20.2.70.405.A.1 NMAC)
  - (1) Additional applicable requirements under the Federal Act become applicable to a major source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.
  - (2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
  - (3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.
  - (4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.
- B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

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## **B114** Emergencies

(20.2.70.304 NMAC)

A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (2) This facility was at the time being properly operated;
  - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
  - (4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### **B115** Stratospheric Ozone

(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices, except for motor vehicle air conditioners (MVAC) and MVAC-like appliances. (40 CFR 82.156)

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(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (40 CFR 82.158)

(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (40 CFR 82.161)

## **B116** Acid Rain Sources

(20.2.70.302.A.9 NMAC)

- A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.
- B. Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions are incorporated into this permit and are federally enforceable.
- C. Emissions exceeding any allowances held by the permittee under Title IV of the Federal Act or the regulations promulgated thereunder are prohibited.
- D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit modification under any other applicable requirement.
- E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Federal Act.
- G. The acid rain permit is an enclosure of this operating permit.

#### **B117** Risk Management Plan

(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.
- B. The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.
- C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan

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shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

## PART C MISCELLANEOUS

## **C100** Supporting On-Line Documents

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
  - (1) Excess Emission Form (for reporting deviations and emergencies)
  - (2) Compliance Certification Report Form
  - (3) Universal Stack Test Notification, Protocol and Report Form and Instructions
  - (4) SOP for Use of Portable Analyzers in Performance Tests

## C101 Definitions

- A. "Daylight" is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <a href="http://aa.usno.navy.mil">http://aa.usno.navy.mil</a>. Alternatively, these times can be obtained from a Farmers Almanac or from <a href="http://www.almanac.com/rise/">http://www.almanac.com/rise/</a>).
- B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.
- C. **"Fugitive emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (20.2.70.7M NMAC)
- D. "Insignificant Activities" means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. (20.2.70.7Q NMAC)
- E. "Natural Gas" is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)

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F. "Natural Gas Liquids" means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)

- G. "National Ambient Air Quality Standards" means the primary (health-based) and secondary (welfare-related) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act. (20.2.72.7Q NMAC)
- H. "NO<sub>2</sub>" or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term "nitrogen dioxide," for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NOx or NO<sub>2</sub>. (20.2.2.7U NMAC)
- I. "NOx" see  $NO_2$
- J. "Potential Emission Rate" means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the Federal Act. (20.2.72.7Y NMAC)
- K. "Restricted Area-Non Military" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- L. "Shutdown", for requirements under 20.2.72.7BB NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- M. "SSM", for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
  - (1) **"Shutdown"**, for requirements under 20.2.7.7H NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
  - (2) "Startup", for requirements under 20.2.7.7I NMAC, means the setting into operation of any air pollution control equipment or process equipment.

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N. "Startup", for requirements under 20.2.72.7DD NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

## C102 Acronyms

	1100
2SLB	
4-stroke right b	
acfm	
AFRair fuel ra	
AP-42 EPA Air Pollutant Emission Fac	
AQB	
AQCR Air Quality Control Reg	
ASTM	
BTUBritish Thermal U	
CAA	
CEMcontinuous emissions monitor	_
cfh cubic feet per h	
cfm cubic feet per min	ıute
CFR	ion
CIcompression ignit	ion
COcarbon monox	
COMS continuous opacity monitoring syst	em
EIB Environmental Improvement Bo	oard
EPA	
gr./100 cfgrains per one hundred cubic t	feet
gr./dscfgrains per dry standard cubic f	oot
GRI Gas Research Instit	ute
H <sub>2</sub> Shydrogen sulf	ide
HAPhazardous air pollut	tant
hphorsepo	
IC	
KW/hr kilowatts per h	our
lb/hrpounds per h	
lb/MMBtupounds per million British Thermal U	
MACT	
MMcf/hrmillion cubic feet per h	
MMscfmillion standard cubic	
N/Anot applica	
TI	ards
NAAQS	
NAAQS	ants
NESHAP	gas uids
NESHAP	gas uids ards

NMED	
NMSA	
NOx	nitrogen oxides
NSCR	non-selective Catalytic Reduction
NSPS	
NSR	
PEM	parametric emissions monitoring
PM	particulate matter (equivalent to TSP, total suspended particulate)
PM <sub>10</sub>	particulate matter 10 microns and less in diameter
PM <sub>2.5</sub>	particulate matter 2.5 microns and less in diameter
pph	pounds per hour
ppmv	parts per million by volume
RATA	relative accuracy test assessment
RICE	reciprocating internal combustion engine
rpm	revolutions per minute
scfm	standard cubic feet per minute
SI	spark ignition
SO <sub>2</sub>	sulfur dioxide
SSM	Startup Shutdown Maintenance (see SSM definition)
TAP	Toxic Air Pollutant
TBD	to be determined
THC	total hydrocarbons
TSP	
tpy	tons per year
ULSD	ultra-low sulfur diesel
USEPA	
UTM	
UTMH	
VHAP	volatile hazardous air pollutant
VOC	volatile organic compounds